

23



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,080	09/17/2003	Keiichiro Yoshihara	C14-161312M/TRK	5062

21254 7590 06/20/2006

MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC  
 8321 OLD COURTHOUSE ROAD  
 SUITE 200  
 VIENNA, VA 22182-3817

EXAMINER

BODDIE, WILLIAM

ART UNIT	PAPER NUMBER
----------	--------------

2629

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/664,080	<b>Applicant(s)</b> YOSHIHARA, KEIICHIRO	
	<b>Examiner</b> William Boddie	<b>Art Unit</b> 2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 11 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/14/06</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. In an amendment the Applicant amended claims 1 and 4, and added new claims 6-20. Claims 1-20 are currently pending.

### ***Response to Arguments***

2. The Applicant has amended the title of the application as suggested by the Examiner. Therefore the previous specification objection is withdrawn.
3. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

Claim 11 is objected to because of the following informalities: line 2 states "...said display surface...." This appears to be a typo, which was intended to read "...a display surface...." Appropriate correction is required.

Claim 14 is objected to because of the following informalities: line 3 states "...said touch a sensor...." This appears to be a typo, which was intended to read "...said touch sensor...." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1, 5-8, 11, 14-16 and 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Vanderheiden (US 6,049,328).

**With respect to claim 1**, Vanderheiden discloses, an electronic equipment comprising (fig. 2): a display device configured to display information (12 and 32 in fig. 1) and including a display surface (14 in fig. 1,2); a touch sensor (18 in fig. 1,2) arranged on at least part of the display surface (clear from figs. 1 and 2); a guide portion (16 in fig. 1,2) configured to protrude from a surface of the touch sensor and to fringe the surface with a line including one of a concave portion (200 in fig. 2) and a convex portion as a vertex configured as a reference position (col. 12, lines 6-9); and

a controller (38 in fig. 1) configured to control an adjustment value (direction of movement and increment of movement) in accordance with a direction of a slide operation from the reference position (col. 12, lines 9-14).

**With respect to claim 5**, Vanderheiden discloses, the electronic equipment of claim 1 (see above), wherein the controller (38 in fig. 1) controls an adjustment value (On or Off) of an output level of an acoustic signal (col. 6, lines 29-45).

**With respect to claim 6**, Vanderheiden discloses, the electronic equipment as claimed in claim 1 (see above), wherein said touch sensor includes one of a display function and a switch function (note the discussion of virtual buttons; col. 11, lines 10-15).

**With respect to claim 7**, Vanderheiden discloses, the electronic equipment as claimed in claim 1 (see above), wherein said touch sensor (18 in fig. 1,2) arranged on said at least a part of said display surface (12,14 in fig. 1,2) is configured to be proximate to said guide portion (16 in fig. 1,2).

**With respect to claim 8**, Vanderheiden discloses, the electronic equipment as claimed in claim 1 (see above), comprising: a graphical image (virtual button 46" in fig. 2) displayed on said display device in said surface of said touch sensor (clear from fig. 2), wherein said graphical image corresponds to said reference position (note the location of the button to the reference notch, 200).

**With respect to claim 11**, Vanderheiden discloses, a method of controlling electronic equipment (fig. 1), a touch sensor (18 in fig. 1,2) arranged on at least a part of said display surface (14 in fig. 1,2), a guide portion (16 in fig. 1,2) configured to protrude from a surface of said touch sensor and to fringe said surface with a line including either a concave portion (200 in fig. 2) or a convex (embossments on left side of 16 in fig. 2) portion as a vertex configures as a reference position (col. 12, lines 6-9), said method comprising:

guiding a finger along said guide portion to said reference position (col. 10, lines 59-65); and,

receiving a contact input on said surface of said touch sensor adjacent to said reference position based on guiding said finger along said guide portion to said reference position (col. 12, lines 6-22).

**With respect to claim 14**, Vanderheiden discloses, the method of controlling electronic equipment as claimed in claim 11 (see above), further comprising:

receiving sliding contact input on said surface of said touch sensor adjacent to said reference position; and,

inputting said adjustment value to said controller based on receiving said sliding contact input (col. 12, lines 6-22).

**With respect to claims 15 and 16**, the method of controlling electronic equipment as claimed in claim 14 (see above), wherein receiving sliding contact input on said surface of said touch sensor in a first direction inputs a positive adjustment value to said controller, in a second direction inputs a negative adjustment value (specifically note col. 12, lines 20-22; which discloses the navigation within a displayed table, wherein different buttons offer positive adjustment (Up) and others offer negative adjustment (Down)).

**With respect to claim 20**, claim 20 is seen as containing the same limitations as those recited in claim 1. Therefore claim 20 is rejected on the same merits shown above in the rejection of claim 1.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-4 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderheiden (US 6,049,328) in view of Serravalle, Jr. (US 4,631,525).

**With respect to claim 2**, Vanderheiden discloses, the electronic equipment in claim 1 (see above).

Vanderheiden does not expressly disclose setting an adjustment value to a predetermined reference value when the reference position is depressed.

Serravalle, Jr. discloses setting an adjustment value to a predetermined reference value when the reference position is depressed (col. 12, lines 46-53).

Serravalle, Jr. and Vanderheiden are analogous art because they are both from the same field of endeavor namely touch sensor use and implementation.

At the time of the invention it would have been obvious to one of ordinary skill in the art to set the increment and movement variable, of Vanderheiden, to a predetermined value when a reference position is pressed, as taught by Serravalle, Jr.

The motivation for doing so would have been to provide an improved slidable adjustment apparatus wherein the relative position of a slidably operable element is represented by a digital position signal which can be used to energize a suitable display (Serravalle, Jr.; col. 2, lines 31-35).

Therefore it would have been obvious to combine Vanderheiden with Serravalle, Jr. for the benefit of an improved slidable adjustment apparatus to obtain the invention as specified in claim 2.

**With respect to claim 3**, Vanderheiden and Serravalle, Jr. disclose, the electronic equipment as claimed in claim 2 (see above).

Vanderheiden further discloses, where the controller (38 in fig. 1) changes the adjustment value (direction and increment of movement) from the reference value when the slide operation is performed after the reference position is depressed (col. 12, lines 9-14).

**With respect to claim 4**, Vanderheiden discloses, the electronic equipment as claimed in claim 1 (see above).

Vanderheiden does not expressly disclose a notification unit configured to provide a notification that the reference position is depressed.

Serravalle, Jr. discloses, a notification unit configured to provide a notification that the reference position is depressed (18 in fig. 1, col. 5, lines 3-27; the operation of Serravalle, Jr. teaches the display of current position of the volume/fader level, this holds true for when the reference position is depressed.).

Therefore it would have been obvious to provide notification that the reference position, of Vanderheiden, has been pressed, as taught by Serravalle, Jr., for the benefit of apprising the operator of the volume setting of the fader (Serravalle, Jr.; col. 5, lines 22-27) to obtain the invention as specified in claim 4.

**With respect to claim 17**, Vanderheiden discloses, the method of controlling electronic equipment as claimed in claim 11 (see above).

Vanderheiden does not expressly disclose, storing a present value of an adjustment parameter in response to receiving said contact input on said surface of said touch sensor adjacent to said reference position.

Serravalle, Jr., discloses, storing in a register (98 in fig. 4) the present value of an adjustment parameter in response to receiving a contact input on a surface of a touch sensor (40 60 in fig. 4) adjacent to a reference position (0 label for example).

At the time of the invention it would have been obvious to one of ordinary skill in the art to store the present value of Vanderheiden as taught by Serravalle, Jr.



The motivation for doing so would have been to allow the device to recall the user-selected value when it is applicable to the use of the reset of the equipment.

Therefore it would have been obvious to combine Serravalle, Jr. with Vanderheiden for the benefit of future use of the selected value to obtain the invention as specified in claim 17.

**With respect to claim 18**, Vanderheiden and Serravalle, Jr. disclose, the method of controlling electronic equipment as claimed in claim 17 (see above).

Vanderheiden further discloses, determining whether said slide operation is performed on said surface of said touch sensor (col. 4, lines 47-52).

**With respect to claim 19**, Vanderheiden and Serravalle, Jr. disclose, the method of controlling electronic equipment as claimed in claim 18 (see above).

Serravalle, Jr. further discloses, adding said adjustment value to said stored present value of an adjustment parameter in response to determining whether said slide operation is performed (col. 12, lines 28-37); and

controlling an output parameter based on adding said adjustment value to said stored present value of an adjustment parameter (col. 2, lines 22-30).

8. Claims 9-10 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderheiden (US 6,049,328) in view of Gillespie et al. (US 2005/0024341).

**With respect to claims 9 and 12**, Vanderheiden discloses, the electronic equipment as claimed in claims 8 and 11 (see above).

Vanderheiden does not expressly disclose that the graphical image represents an initial value in a parameter adjustment range.

Gillespie discloses, a graphical image that represents an initial value in a parameter adjustment range (1032, bar in fig. 10b).

Gillespie and Vanderheiden are analogous art because they are from the same field of endeavor namely, touch screen functionality and interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to replace the virtual buttons of Vanderheiden with the scroll bar graphics taught by Gillespie.

The motivation for doing so would have been to allow the user to scroll through the text quickly with a conventional scroll device that is well known to users (Gillespie, para. 89). This addition becomes even more useful if, as suggested by Vanderheiden, the text size is enlarged to allow visually impaired users to view the text.

Therefore it would have been obvious to combine Vanderheiden with Gillespie for the benefit of scroll functionality to obtain the invention as specified in claim 9.

**With respect to claims 10 and 13,** Vanderheiden discloses, the electronic equipment as claimed in claims 8 and 12 (see above).

Vanderheiden does not expressly disclose, 2<sup>nd</sup> and 3<sup>rd</sup> graphical images that represent increasing and decreasing the value of a parameter adjustment range.

Gillespie discloses, 2<sup>nd</sup> and 3<sup>rd</sup> graphical images (1032, arrows in fig. 10b) displayed on a display device (fig. 10b) in a surface of a touch sensor (para. 89) on either side of a graphical image (1032, bar in fig. 10b), wherein said second and third

Art Unit: 2629

graphical images represent one of a value to be increased (up arrow) and a value to be decreased (down arrow) from said initial value in a parameter adjustment range (see discussion in para. 89).

Gillespie and Vanderheiden are analogous art because they are from the same field of endeavor namely, touch screen functionality and interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to replace the virtual buttons of Vanderheiden with the scroll bar graphics taught by Gillespie.

The motivation for doing so would have been to allow the user to scroll through the text quickly with a conventional scroll device that is well known to users (Gillespie, para. 89). This addition becomes even more useful if, as suggested by Vanderheiden, the text size is enlarged to allow visually impaired users to view the text.

Therefore it would have been obvious to combine Vanderheiden with Gillespie for the benefit of scroll functionality to obtain the invention as specified in claim 10.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Will Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wlb  
6/5/06



RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600